

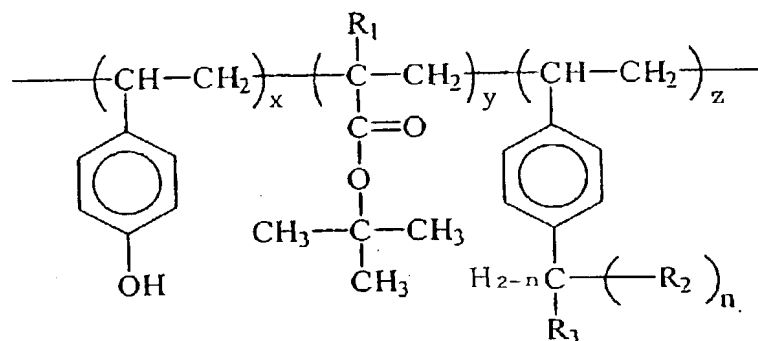
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PCT/KR00/00956

WHAT IS CLAIMED IS:

1. A polymer for a chemically amplified resist represented by the following Formula 1:

5 [Formula 1]



Wherein R_1 is hydrogen or methyl, R_2 is hydrogen or $\text{CH}_2\text{CH}_2\text{COOC}(\text{CH}_3)_3$, R_3 is Cl, Br, hydroxy, cyano, t-butoxy, CH_2NH , CONH_2 , $\text{CH}=\text{NH}$, $\text{CH}(\text{OH})\text{NH}_2$ or $\text{C}(\text{OH})=\text{NH}$.

10 $x + y + z = 1$, x is 0.1 – 0.9, y is 0.01 – 0.89, z is 0.01 – 0.89,

n is 1 or 2, and when n is 2, both R_2 are the same.

2. The polymer for a chemically amplified resist according to claim 1, wherein said polymer has a molecular weight of 3,000 to 30,000 and a degree of dispersion of 1.01 to 3.00.

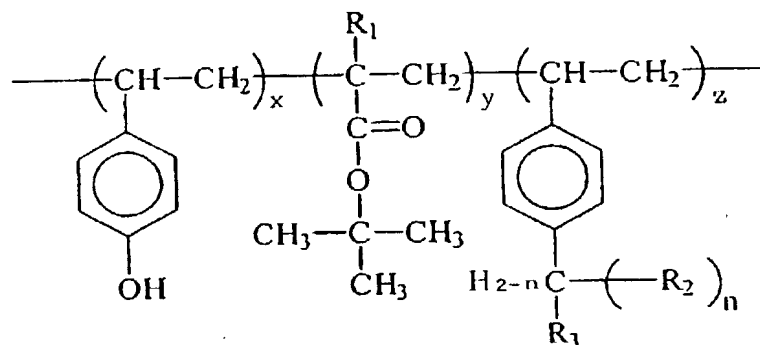
- 15 3. A light sensitive resist composition comprising

a) a polymer represented by the following formula 1:

[Formula 1]

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Wherein R_1 is hydrogen or methyl, R_2 is hydrogen or $\text{CH}_2\text{CH}_2\text{COOC}(\text{CH}_3)_3$, R_3 is Cl, Br, hydroxy, cyano, t-butoxy, CH_2NH , CONH_2 , $\text{CH}=\text{NH}$, $\text{CH}(\text{OH})\text{NH}_2$ or $\text{C}(\text{OH})=\text{NH}$,

5 $x + y + z = 1$, x is 0.1 – 0.9, y is 0.01 – 0.89, z is 0.01 – 0.89,

n is 1 or 2, and when n is 2, both R_2 are the same.

b) an acid producing agent; and

c) a solvent.

4. A light sensitive resist composition according to claim 3, wherein said
10 polymer represented by Formula 1 is contained in the composition in an amount of 0.1 to 50 wt%.

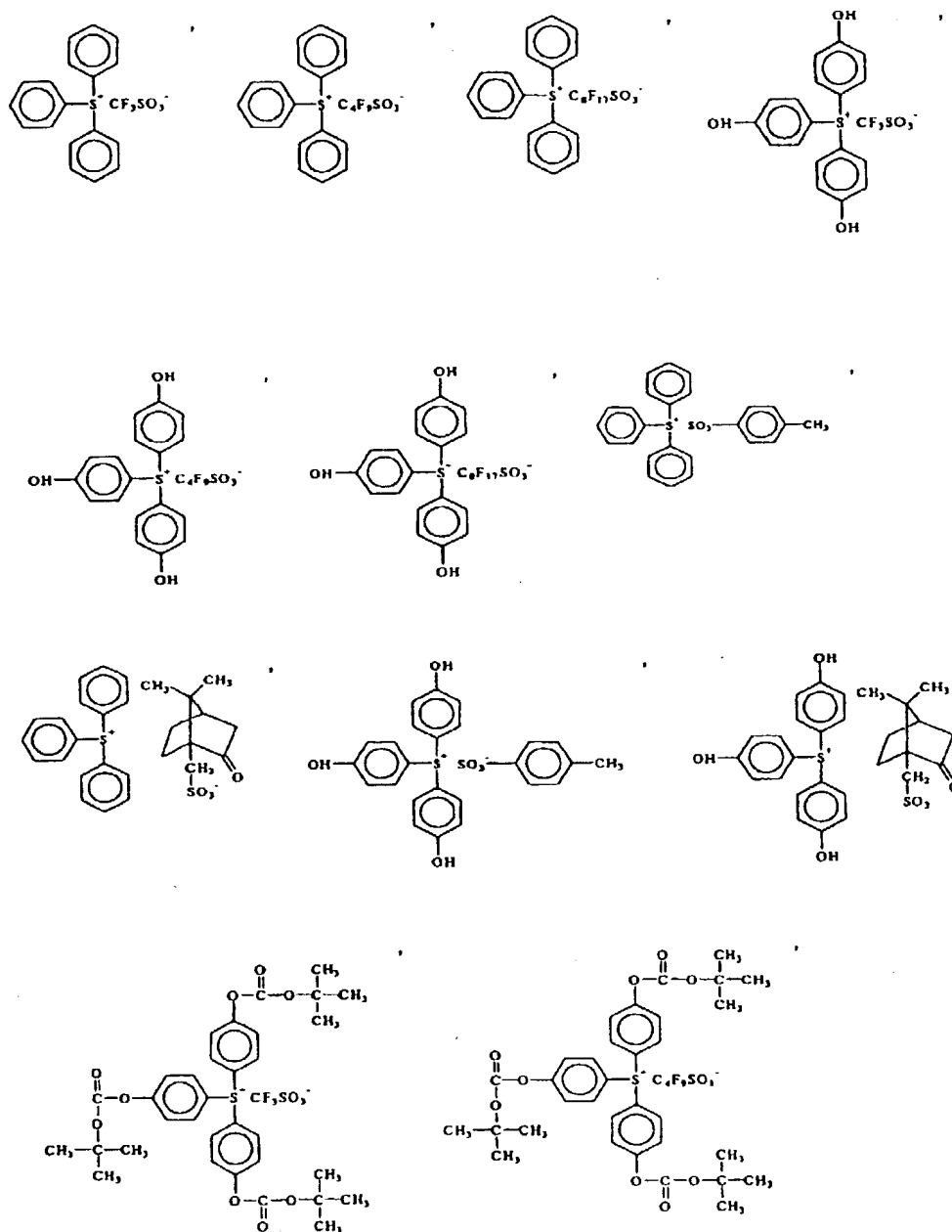
5 A light sensitive resist composition according to claim 3, wherein said b)

acid producing agent is selected from the group consisting of:

sulfonium salt selected from:

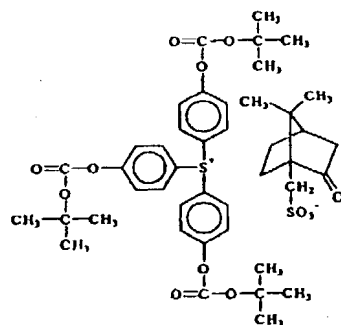
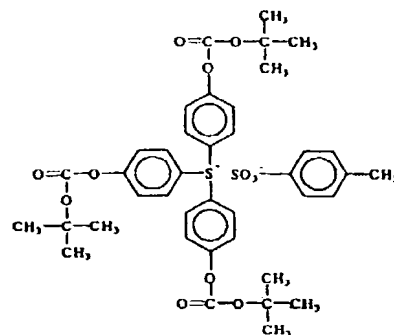
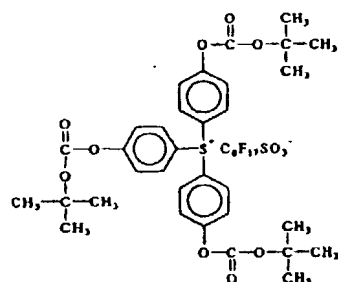
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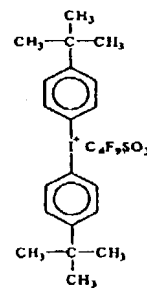
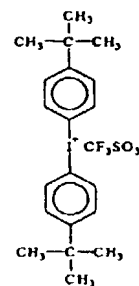
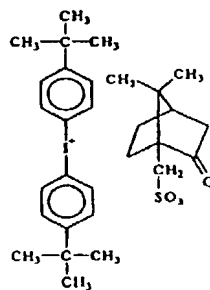
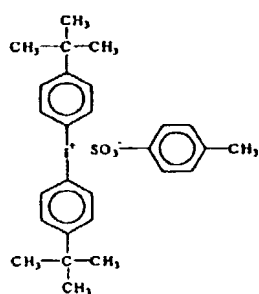


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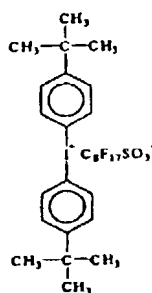


iodonium salt selected from:

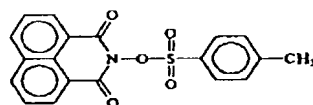
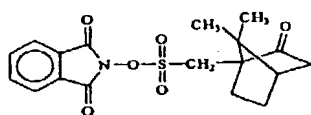
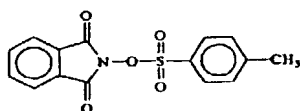


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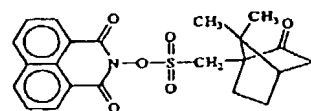
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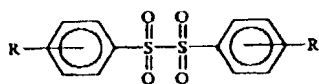
N-iminosulfonates selected from:



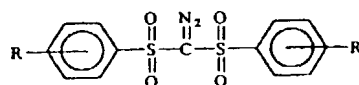
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disulfonates which is

(Wherein R is H, $-\text{CH}_3$ or $-\text{C}(\text{CH}_3)_3$)

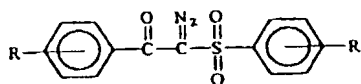
bisarylsulfonyldiazomethane which is



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(Wherein R is H, $-\text{CH}_3$ or $-\text{C}(\text{CH}_3)_3$)

arylcarbonylarylsulfonyldiazomethane which is



(Wherein R is H, -CH₃ or -C(CH₃)₃),

and a mixture thereof,

- 5 and said acid producing agent is contained in the composition in an amount of 0.1 to 50 wt%.
6. A light sensitive chemically amplified resist composition according to claim 3, wherein said c) solvent is selected from the group consisting of ethyleneglycol monoethylether acetate, propyleneglycol monomethylether acetate, ethylether acetate, n-butyl acetate, methyl isobutyl ketone, ethyl
- 10 acetate, 3-ethoxy-ethylpropionate, 3-methoxy-methylpropionate, diglycol lactate, 2-heptanone, diacetonealcohol, β -methoxyisobutyric acid methyl ester, propyleneglycol monomethylether, propyleneglycol monomethylpropionate, methyl lactate, butyl lactate, ethyl pyruvate, γ -
- 15 butyrol lactone, and a mixture thereof, and said solvent is contained in the composition in an amount of 0.1 to 99 wt%.